UNDERSTANDING Colorectal Cancer

What is Colorectal Cancer? Cancer that begins in the colon is called colon cancer and cancer that begins in the rectum is called rectal cancer. Cancers affecting either of these organs is also called colorectal cancer.

Colorectal cancer occurs when some of the cells that line the colon or the rectum become abnormal and grow out of control. The abnormal growing cells create a tumor which is the cancer.

Who is at Risk for Colorectal Cancer? Everybody is at risk for colorectal cancer. Colorectal cancer is the 2nd leading type of cancer causing deaths in the U.S.A. The majority of people who develop colorectal cancer have no known risk factors.

The exact cause of colorectal cancer is not yet known. Below are some factors that could increase a person's risk of developing the disease.

- **Age -** The disease is more common in people over 50. The chance of getting colorectal cancer increases with each decade of life. However, it has also been detected in younger people.
- **Gender -** Overall the risks are equal, but women have a higher risk for colon cancer and men are more likely to develop rectal cancer.
- **Polyps -** Begin as non-cancerous growths on the inner wall of the colon or rectum; this is fairly common in people over 50 years of age. Adenomas are one type of non-cancerous polyps that can mutate and are the potential precursors of colon and rectal cancer.
- **Personal history -** Research shows that women who have a history of ovarian or uterine cancer have a slight increased risk of developing colorectal cancer. In addition, people who have Ulcerative colitis or Crohn's disease also are at higher risk.
- **Family history -** Parents, siblings, and children of a person who has had colorectal cancer are more likely to develop the disease themselves. A family history of familial polyposis, adenomatous polyps, or hereditary polyp syndrome also increases the risk.
- **Diet -** A diet high in fat and calories and low in fiber may be linked to a greater risk.
- **Lifestyle factors -** Alcohol, smoking, lack of exercise, and overweight status are additional risk factors.
- **Diabetes -** Diabetics have a 30-40% increased risk.

Signs & Symptoms

Colorectal cancer may not cause any symptoms in early stages. However the following signs should raise suspicion:

- Change in bowel habits: Diarrhea or constipation or a change in the consistency of stool
- Narrow, pencil-thin stools
- Rectal bleed or blood in stool
- Persistent abdominal discomfort such as gas, pain or cramps
- Feeling bowel does not empty completely
- Unexplained weight loss
- Constant fatigue

Screening tests

- **Fecal Occult Blood Test (FOBT) -** Checks for hidden blood in the stool.
- **Sigmoidoscopy -** Sigmoidoscope is a long, flexible tube with a tiny video camera at the tip that is inserted into the rectum to allow the doctor to view the lower part of the colon – the rectum, the descending colon, and the sigmoid colon.
- **Colonoscopy -** Colonoscope is a long, flexible tube with a tiny video camera at the tip that is inserted into the rectum to allow the doctor to view the inside of the entire colon. The doctor may also biopsy the tissue and remove polyps during a colonoscopy.
- **Barium enema -** Chalky white liquid called barium is released into the colon (through the rectum) and then an X-ray is performed
- **Digital rectal exam**

Diagnostic tests

If the screening tests or symptoms indicate the possibility of colorectal cancer, patients will undergo a diagnostic workup. These will help determine if colorectal cancer is present, and the stage of the disease. Tests may include:

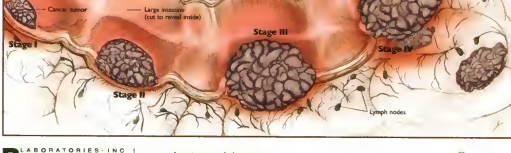
- **Medical history**
- **Physical exam**
- **Blood tests**
- **Biopsy -** abnormal tissue is removed and examined during a screening test to check for cancer cells.
- **Imaging Tests**
- **Ultrasound**
- **Computed tomography (CT)**
- **Magnetic resonance Imaging (MRI)**
- **Chest X-ray** (to see if the cancer has spread to the lungs)

Treatments

Choice of treatment(s) depends on the location of the tumor (colon or rectum) and the stage of the disease. Common types of treatments include:

- **Surgery -** This is the most common treatment. It is used for removal of polyps and tumors and to check for the spread of the disease. Common types include laparoscopy and open surgery. After removal of part of the colon or rectum, the healthy parts are usually reconnected. When reconnection is not possible, a colostomy may be performed.
- **Chemotherapy -** Drug therapy that prevents the spread of cancer cells.
- **Radiation Therapy -** Also known as Radiotherapy, uses high energy rays to kill cancer cells.
- **Biological Therapy -** Patients receive a monoclonal antibody through a vein which binds to colorectal cancer cells, interfering with their cell growth and spread in the body.

The Stages of Cancer



The earlier cancer is found and treated, the better the chances of getting well. The diagnosis of cancer is made by a microscopic test (biopsy) of a piece of tissue. Medical imaging techniques are used to measure how much the cancer has spread (grown) – this is known as staging.
The doctors often decide on the treatment based on the stage of cancer.

Doctors identify the stages of cancer as follows:

Stage I: The cancer has grown into the inner wall of the colon or rectum. The tumor has not yet reached the outer wall of the colon or extended outside the colon. Dukes' A is another name for Stage I colorectal cancer.

Stage II: The tumor extends more deeply into or through the wall of the colon or rectum. It may have invaded nearby tissue, but cancer cells have not yet spread to the lymph nodes. Dukes' B is another name for Stage II colorectal cancer.

Stage III: The cancer has spread to nearby lymph nodes, but not to other parts of the body. Dukes' C is another name for Stage III colorectal cancer.

Stage IV: The cancer has spread to other parts of the body, such as the liver or lungs. Dukes' D is another name for Stage IV colorectal cancer.

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Physician Notes:

Patient Instructions: